

## United States Patent [19]

Ng et al.

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[54] **NON-IMPACT COPIER/PRINTER SYSTEM COMMUNICATING ROSTERIZED, PRINTER INDEPENDANT DATA**

[75] Inventors: Yee S. Ng, Fairport; Eric K. Zeise, Pittsford, both of N.Y.

[73] Assignee: Eastman Kodak Company, Rochester, N.Y.

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[58] Field of Search ..... 346/107 R; 355/200, 355/202; 358/75, 80, 443, 444, 446, 447, 455, 401, 403, 442

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Primary Examiner—David F. Yockey

Attorney, Agent, or Firm—Norman Rushefsky

## [57] ABSTRACT

A copier/printer system includes an image scanner for scanning a document and providing, after a compression step, digital image scanning signals,  $P_1$ , that may be communicated to a computer system for display and editing or alternatively communicated to a grey level printer having a magnetic tape memory. The computer system may be used to display the scanned image for editing by an operator and is coupled to the printer so that the edited image signals,  $P_2$ , which may be the scanned signals and a common page description language to modify its usage, may be printed by the printer. The edited image signals,  $P_2$ , may be sent to the printer over a suitable network. The printer includes image processing electronics for transforming the edited data,  $P_2$ , into device independent data signals,  $P_3$ . Such signals may be received by printers of the same type; i.e., those employing similar process and halftone algorithms. The signals,  $P_3$ , are then converted by a look-up table in the printer to device dependent signals,  $P_4$ , for printing by the printer. The signals,  $P_3$ , are stored in memory which may be recirculated for making multiple copies. The memory medium storing the  $P_3$  signals may be transported or otherwise communicated to other printers of the same type for reproducing the data since the data is in common data signal or device independent form. The memory medium storing the  $P_3$  signals may also store the  $P_1$  and/or  $P_2$  signals for re-editing purposes using the computer and display.

11 Claims, 4 Drawing Sheets

